STAR

ENGINEERING CHANGE NOTICE

Page 1 of 2

ID NO 621343

2. ECN Category (mark one)	3. Originator's Name, Organization, MSIN, and Telephone No.	3a. USQ Required?	4. Date
Supplemental [] Direct Revision [X] Change ECN [] Temporary [] Standby [] Supersedure [] Cancel/Void []	J. Jo, 8E480, R2-12, 373-9322	[] Yes [X] No	05-05-95
	5. Project Title/No./Work Order No.	6. Bldg./Sys./Fac. No.	7. Approval Designator
	TANK 241-B-104 TANK CHARACTERIZATION PLAN	241-B	N/A
	8. Document Numbers Changed by this ECN (includes sheet no. and rev.)	9. Related ECN No(s).	10. Related PO No.
	WHC-SD-WM-TP-349, REV. 0	N/A	N/A

11a. Modification Work	11b. Work Package No.	11c. Modification Work Complete	11d. Restored to Original Condition (Temp. or Standby ECN only)
[] Yes (fill out Blk. 11b) [X] No (NA Blks. 11b, 11c, 11d)	N/A	N/A Cog. Engineer Signature & Date	N/A Cog. Engineer Signature & Date

12. Description of Change

The risers were identified for the sampling event in the Tank Characterization Plan (riser 2 and riser 7).

13a. Justification (mark one)

Criteria Change	[X]	Design Improvement	[]	Environmental	[]	Facility Deactivation	[]
As-Found	[]	Facilitate Const	[]	Const. Error/Omission	[]	Design Error/Omission	[]

13b. Justification Details

Identification of risers directs sampling crew which risers to use for the sampling event.

14. Distribution (include name, MSIN, and no. of copies)

see attached Distribution Sheet

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A-7900-013-2 (11/94) GEF095

ENGINEERING CHANGE NOTICE

1. ECN (use no. from pg. 1): 621343

15. Design Verification Required	16. Cost Impact				17. Schedule Impact (days)	
	ENGINEERING		CONSTRUCTION			
[] Yes	Additional	[] $	Additional	[] $	Improvement	[]
[X] No	Savings	[] $	Savings	[] $	Delay	[]

18. Change Impact Review: Indicate the related documents (other than the engineering documents identified on Side 1) that will be affected by the change described in Block 12. Enter the affected document number in Block 19.

SDD/DD	[]	Seismic/Stress Analysis	[]	Tank Calibration Manual	[]
Functional Design Criteria	[]	Stress/Design Report	[]	Health Physics Procedure	[]
Operating Specification	[]	Interface Control Drawing	[]	Spares Multiple Unit Listing	[]
Criticality Specification	[]	Calibration Procedure	[]	Test Procedures/Specification	[]
Conceptual Design Report	[]	Installation Procedure	[]	Component Index	[]
Equipment Spec.	[]	Maintenance Procedure	[]	ASME Coded Item	[]
Const. Spec.	[]	Engineering Procedure	[]	Human Factor Consideration	[]
Procurement Spec.	[]	Operating Instruction	[]	Computer Software	[]
Vendor Information	[]	Operating Procedure	[]	Electric Circuit Schedule	[]
OM Manual	[]	Operational Safety Requirement	[]	ICRS Procedure	[]
FSAR/SAR	[]	IEFD Drawing	[]	Process Control Manual/Plan	[]
Safety Equipment List	[]	Cell Arrangement Drawing	[]	Process Flow Chart	[]
Radiation Work Permit	[]	Essential Material Specification	[]	Purchase Requisition	[]
Environmental Impact Statement	[]	Fac. Proc. Samp. Schedule	[]	Tickler File	[]
Environmental Report	[]	Inspection Plan	[]		[]
Environmental Permit	[]	Inventory Adjustment Request	[]		[]

19. Other Affected Documents: (NOTE: Documents listed below will not be revised by this ECN.) Signatures below indicate that the signing organization has been notified of other affected documents listed below.

Document Number/Revision	Document Number/Revision	Document Number Revision
N/A		

20. Approvals

Signature	Date	Signature	Date
OPERATIONS AND ENGINEERING		ARCHITECT-ENGINEER	
Cog. Eng. J. Jo	5-4-95		
Cog. Mgr. J.G. KRISTOFZSKI	5-4-95		

SUPPORTING DOCUMENT

1. Total Pages 33

2. Title	3. Number	4. Rev No.
Tank 241-B-104 Tank Characterization Plan	WHC-SD-WM-TP-349	0A

5. Key Words	6. Author
Tank 241-B-104, Tank Characterization Plan	Name: Jaiduk Jo Signature: Jaiduk Jo Organization/Charge Code 8E480/MDR21

7. Abstract

N/A

APPROVED FOR PUBLIC RELEASE

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(5)

RECORD OF REVISION	(1) Document Number WHC-SD-WM-TP-349	Page 1

(2) Title
TANK 241-B-104 TANK CHARACTERIZATION PLAN

CHANGE CONTROL RECORD

(3) Revision	(4) Description of Change - Replace, Add, and Delete Pages	Authorized for Release	
		(5) Cog. Engr.	(6) Cog. Mgr. Date
0	(7) WHC-SD-WM-TP-349, REV 0, EDT 610415, April 12, 1995		
0A RS	Replaced pages A-1; ECN 621343	[signature]	[signature] 5/4/95

A1.0 TANK CHARACTERIZATION OBJECTIVES

This Sampling and Analysis Plan (SAP) will identify characterization objectives pertaining to sample collection, hot cell sample breakdown, and laboratory analytical evaluation and reporting requirements in accordance with the *Tank Safety Screening Data Quality Objective* (Babad and Redus 1994) and *Interim Data Quality Objectives for Waste Pretreatment and Vitrification* (Kupfer et al. 1994). These Data Quality Objectives (DQO's) are described in the Tank Characterization Plan (TCP) for tank 241-B-104 (B-104). The pretreatment DQO, at the request of the Pretreatment Program, will have limited use in this SAP (refer to Section A6.1). This SAP will also identify procedures and requirements for collecting and characterizing samples from tank B-104 by the core sampling method.

A2.0 TANK STATUS AND SAMPLING INFORMATION

A2.1 TANK STATUS

Tank B-104 is identified as a low-heat load non-Watch List tank,that is passively ventilated, and is categorized as sound with interim stabilization and intrusion prevention completed. It entered service in August 1946 and as of December 31, 1994, it stored 1,404 kL (371 kgal) of non-complexed waste, which corresponds to a depth of 330 cm (130 inches). The waste is comprised of 3.9 kL (1 kgal) of supernatant; 230 kL (61 kgal) of saltcake; 340 kL (90 kgal) of unknown waste; and 829 kL (219 kgal) of sludge which includes 151 kL (40 kgal) of pumpable liquid remaining (Brevick et al. 1994). However, this contradicts with the current Hanlon document which, states that there are 261 kL (69 kgal) of saltcake, 3.9 kL (1 kgal) supernatant, and 1,140 kL (301 kgal) of sludge which includes 154 kL (47 kgal) of pumpable liquid remaining (Hanlon 1995).

The current maximum temperature reading from July 1993 is 66° F. Tank B-104 contains a single thermocouple tree with 12 thermocouple probes in riser 5. Specific thermocouple elevations are not available. Tank B-104 is a low-heat load tank and has a semiannual temperature monitoring requirement for January and July (Brevick 1994).

A2.2 SAMPLING INFORMATION

Tank B-104 is currently scheduled to be core sampled. Two core samples shall be collected from risers 2 and 7 of the tank. If a different riser is capable of meeting the intent of other requirements in the DQO, it may be used if the riser number is recorded and approved in writing in advance by the sampling cognizant engineer. Risers used may be recorded on a permanent data sheet, or recorded directly in a work package.

Based on current waste volume information, each of the core samples is expected to consist of seven segments. Segments 2 through 7 should be 48 cm (19 inches), and segment 1 should be 41 cm (16 inches). It should be noted that the sampling objective is to obtain a vertical profile of the waste; therefore, more or less segments may need to be taken depending on the accuracy of the current waste volume records. For detailed information regarding the sampling activities, refer to work package ES-95-166. This document contain operating procedures and the chain-of-custody records for this sampling event.

DISTRIBUTION SHEET

To	From	Page 1 of 2
Distribution	Characterization Plans and Reports	Date 5-5-95
Project Title/Work Order		EDT No.
Tank 241-B-104 Tank Characterization Plan (WHC-SD-WM-TP-349), Revision 0A		ECN No. 621343

Name	MSIN	Text With All Attach.	Text Only	Attach./ Appendix Only	EDT/ECN Only
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